DESIGN STATEMENT

Solar Smart Compaction Bins offers an efficient bin with 100% solar power.

Features include solar panel of up to 55W (1), eight times capacity than traditional bins with compaction force up to 500 kgs (2), hand detection safety sensor & fire detection sensor (3), wheelie bin compatible (4), LED backlight or LCD video advertisement (5), wifi hotspot (6), wireless transmission (7), GPS location tracking (8), CCTV (9) Environmental technology (10) and 5G cells (11).

APPLICABLE LOCATION

All Merri-bek.

COUNCIL STANDARD DRAWING

N/A

CROSS REFERENCE DOCUMENT

N/A

STANDARD SPECIFICATION

Type: Merri-bek Solar Smart Compaction Bins

Size:

Bin	Dimensions (HxWxL)	Weight
100L	610 x 610 x 1167mm	140kg
120L	624 x 762 x 1440mm	155kg
240L	740 x 840 x 1536mm	190kg

SUPPLIER

Smart City Solutions or similar
www.smartcitysolutions.com.au

MAINTENANCE

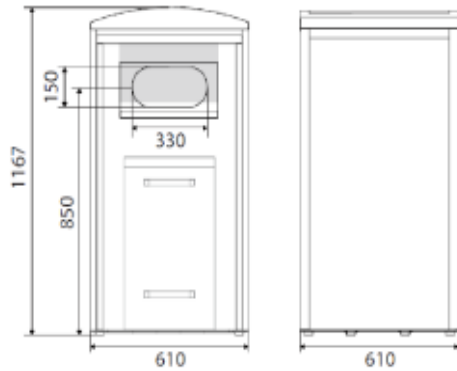**Waste Services:** Bins are emptied at varying frequencies depending on location.

GENERAL NOTES
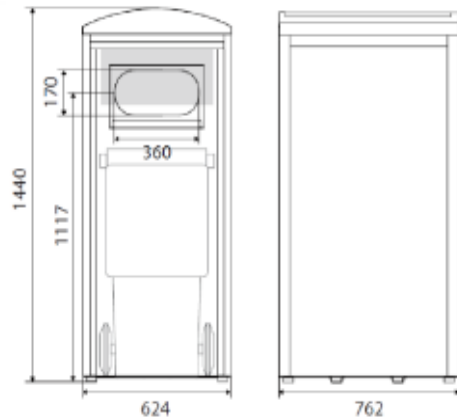1. *Refer to manufacturer's installation manual*

Merri-bek
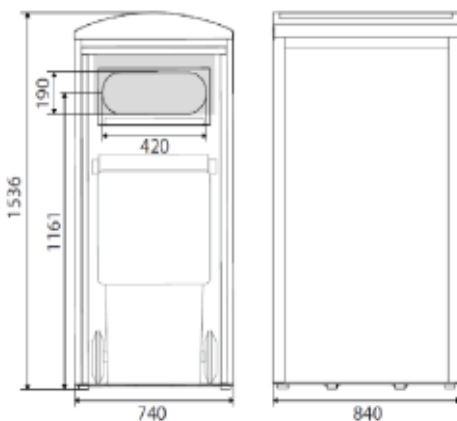City Council

Clean CUBE Technical Specifications

The Clean CUBE includes both fill-level sensing and compaction features. Available in Mini, Standard, and Max models, the Standard and Max CCB are compatible with standardized 120L and 240L wheelie bins. Charging options are solar, AC, and hybrid.

100L Model

120L Model

240L Model

Product Dimension

Model	Size (W x L x H) (mm)	Net Weight (Kg)
Mini	610 x 610 x 1167	150
Standard	624 x 762 x 1440	170
Max	740 x 840 x 1536	194

Bin Volume

Model	Compacted trash	Uncompacted trash
Mini*	100L	500L
Standard	120L	600L
Max	240L	1200L

*120L customized inner bin available

Materials
- ROHS compliant
- Acrylic cover for advertisement panels
- 20g/m2 zinc EGI galvanized steel sheet metal construction for both interior and exterior structures
- 80µm SDPE coating for optimal durability and weatherability

Compaction Feature
- Compaction Force: Up to 700kgf
- Cycle Time: Approx. 40 seconds
- Motor Size: 1/6-HP DC geared motor
- Drive System: Geared motor with unique X-frame drive
- Control System: Smart microcontroller-based automated system
- Communication System: GSM/WCDMA module
- Location System: GPS module

Power and Electronic Control
- System Voltage: 12 Volts DC
- Power Consumption: 15Wh/day average
- Battery: Spill-proof, sealed lead-acid storage
    - 100L: 12V 36Ah battery
    - 120L: 12V 46Ah battery
    - 240L: 12V 46Ah battery
- PV panel: Crystalline silicon solar module
    - 100L: 35W PV panel
    - 120L: 50W PV panel
    - 240L: 50W PV panel
- Polycarbonate protective cover for PV panel
- Tri-color LED status indicator lamps

Safety Features
- Rated IP45 for ingress protection
- CE certified
- Hand detection safety sensors
- Fire detection temperature sensor
- Access locks for front door, top cover and side covers
- Optional mounting brackets

Design Options
- A1/A2 size advertisement frame with acrylic cover
- LED backlight for A1/A2 size advertisement
- LCD video panel model available
- Audio speaker
- Wi-Fi hotspot
- Black, brown, and green standard colors (custom colors available)
- Customizable vinyl wraps available

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